### DRAFT



Federal Aviation Administration

## Advisory Circular

Subject: PILOT- IN- COMMAND QUALIFICATIONS Date: xx/xx/99 AC No: 121.445-1E

FOR SPECIAL AREAS/ROUTES AND AIRPORTS, Initiated By: AFS-200 Change:

14 CFR PART 121, SECTION 121.445

#### 1. PURPOSE.

**a.** This advisory circular (AC) provides information for all Title 14 of the Code of Federal Regulations (14 CFR) Part 119 certificate holders who conduct operations under 14 CFR Part 121 concerning those areas/routes and airports where the Administrator has determined that special qualifications are required of pilots-in-command (PIC) as provided in Part 121, § 121.445. This AC provides information for establishing a data collection process to enable certificate holders, their pilots, and the Federal Aviation Administration (FAA) to assess whether an individual route or airport should be designated as a special qualification route or airport.

- **b.** This AC contains critical safety information and establishes a guideline that should be used by 14 CFR Parts 91, 135, 125 and 129 operators. The FAA strongly recommends that these operators use the information provided in this AC when conducting operations at airports listed in Appendix 1. Operators from International Civil Aviation Organization (ICAO) member states are also invited to assist in the assessment process and benefit from this information.
- **2. CANCELLATION.** This AC cancels AC 121.445-1D, Pilot-in-Command Qualifications for Special Area/Routes and Airports.
- **3. RELATED MATERIAL.** Title 14 CFR Part 121, §§ 121.443 and 121.445.
- **4. BACKGROUND.** The operating rules governing domestic and flag air carriers have for some time required PICs to be qualified over the routes and into airports where scheduled operations are conducted. Amendment 121-159 added a requirement for PICs who serve in supplemental operations to be qualified in accordance with § 121.445, and added the pictorial means as an additional method of qualifying PICs for operations into special qualification airports.
- **5. GENERAL.** The operating rules of Part 121, subpart N, which relate to Crewmember Qualifications, prescribe specific PIC qualifications regarding routes and airports. Section 121.443(a) requires each certificate holder to provide a system acceptable to the Administrator for disseminating certain

information specified to the PIC and appropriate flight operations personnel. The requirements for special airport qualifications and type of navigation qualification for certain areas or routes are as follows.

#### a. Special PIC Airport Qualifications.

- (1) Section 121.445(a) states that the Administrator may determine that certain airports (due to items such as surrounding terrain, obstructions or complex approach/departure procedures) are special airports requiring special airport qualifications. Section 121.445(b) prescribes the methods for qualifying a PIC to conduct operations into a particular special qualification airport. The purpose of § 121.445(b) is for certificate holders to make their PICs aware of potentially hazardous conditions that exist during departure and arrival at special qualification airports. The requirements of § 121.445(b) are not to be confused with those requirements that apply to airports for which special entry or departure procedures have been developed and used by some certificate holders. For example, § 121.445 does not contain requirements for the development of special departure and arrival procedures for certain airports nor does it require flight crewmember training on such procedures. Moreover, the potential hazard at some of these special qualification airports is so great that some certificate holders have not only voluntarily developed their own procedures for entry or departure at these airports, but are training and qualifying their flight crewmembers in the use of those procedures.
- (a) For other than takeoff operations at airports where high terrain poses a potential hazard, certificate holders should develop escape procedures for each aircraft type in the event there is an engine failure or a navigation system failure and normal published operating procedures are no longer usable.
- (b) Accordingly, if an operator uses a special qualification airport in its operations, regardless of whether it is a provisional, regular, refueling, alternate, or Extended Twin Engine Operations (ETOPS) alternate airport, then the qualification requirements in § 121.445(b) apply. However, there are exceptions to the general requirement of § 121.445(b) pertaining to the requirement for a PIC to be qualified to operate into a special qualification airport. For example, when a PIC for a flight into a special qualification airport is not qualified in accordance with § 121.445(b), but the Second In Command (SIC) serving on that flight has made an entry (i.e. an entry includes a takeoff and landing while serving as a pilot flight crewmember) into that special airport within the preceding 12 calendar months, then the regulation permits the PIC to make that entry even though he/she had not qualified prior to that flight. Once the PIC has made that entry, he/she is qualified to make subsequent entries for the following 12 calendar months.
- (2) Two methods for complying with special airport qualification requirements are shown in § 121.445(b) and as follows:
- (a) By having the PIC or SIC make an entry to that airport (including a takeoff and landing) while serving as a pilot flight crewmember; or
- (b) By qualifying the PIC through use of pictorial means acceptable to the Administrator for that airport.
- **b. Special Areas and Routes.** Section 121.445 (a) and (d) require, in part, that the PIC, meet the area and route qualification requirements for pilot operated navigation systems. Please refer to paragraph 8 for detailed information on special areas and routes.

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**c. Methodology.** Input from Appendix 2 airport assessments will be used by AFS-220 to determine whether or not an area, route, or airport should be added to the list of airports, areas, and routes requiring special qualifications.

- **d. Assessment Guidelines.** The assessment guidelines which the FAA uses to determine whether special PIC qualifications are required are contained in a survey aid attached as Appendix 2. Any individual can determine that an assessment/re-assessment is necessary. Any crewmember or other party may fill out and submit this aid. Key elements of the survey/feedback process include the following:
- (1) Establishes a <u>method</u> for standardized reporting to promote development of effective special airport qualification procedures,
- (2) Promotes <u>assessment</u> of airport status and PIC qualifications by the people actually operating at these airports,
- (3) Promotes <u>re-assessment</u> of airports previously designated as special PIC qualification airports, and
- (4) Establishes a <u>delivery system</u> for operators and inspectors to obtain timely updates regarding special qualification airports, with convenient access through a public FAA internet web site.
- **e. Special airports.** The list of special airports provided in Appendix 1 currently contains a listing of airports, grouped in the following categories: U.S. airports (lower 48 states), U.S. airports (Alaska and Hawaii), U.S. military airports, European airports, Peoples Republic Of China (PRC) airports, Commonwealth of Independent States (CIS) airports, Caribbean airports, Central American Airports, South American Airports and Pacific Airports. Additional categories may be added as appropriate. The internet site will hold the most current Appendix 1 data and will supersede Appendix 1 information found in this AC. This AC will be updated only when there is a change to information in the base document and Appendix 2, not when changes occur to the airports listed in Appendix 1.

#### 6. INITIAL ASSESSMENT AND DESIGNATION PROCESS.

- **a.** Initial assessment of an area/route or airport should be conducted using the guidelines listed in Appendix 2. While these guidelines may be included in the assessment process, the list is not all encompassing, and any additional factors identified by the person making the assessment should be included.
- **b.** An initial assessment may be conducted by any competent person (e.g. an FAA operations inspector, a pilot, or by any other competent observer associated with an air carrier). Most commonly, an air carrier will wish to commence operations into an airport which has not previously been included in their route structure. The operator should refer to the airport list contained in Appendix 1 (the latest revision will be found on the FAA internet site, as indicated in paragraph 10) in order to determine if the airport has been assessed previously and requires special PIC qualifications. If Appendix 1 shows special PIC qualification but the operator disagrees with that determination, the operator may initiate a request for re-assessment in accordance with paragraph 7.
- **c.** If the airport is not included in Appendix 1, the operator may assess the airport in accordance with the guidelines listed in Appendix 2 (operations conducted within the CIS and the PRC are covered under paragraph 9). The extent of the assessment conducted by the operator is dependant upon the nature and

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complexity of certain factors associated with the airport. For example, an airport with an approved IFR approach/departure procedure and a unique characteristic such as a politically sensitive boundary may require designation as a special qualification airport. In this case, the special PIC qualification may be accomplished through flightcrew familiarization by viewing an airport pictorial depicting the politically sensitive boundary. In this case, with no other factors identified, the assessment could be concluded without further analysis. However, an airport with complex terrain features which may cause each operator to develop non-standard aircraft specific maneuvering procedures (in visual conditions) may not only require designation as a special qualification airport, but may also cause operators to train their flightcrews in the use of such procedures. It is important to note that two operators operating the same type of aircraft may have different procedures for operating at that airport. Also, § 121.445(c) provides that the special airport qualifications prescribed by § 121.445(b) do not apply when an entry to that airport (including a takeoff or a landing) is being made if the ceiling at that airport is at least 1,000 feet above the lowest Minimum En Route IFR Altitude (MEA) or Minimum Obstruction Clearance Altitude (MOCA), or initial approach altitude prescribed for the instrument approach procedure for that airport, and the visibility at that airport is at least 3 miles. Moreover, there are instances where operators who have developed special airport arrival or departure procedures have also added flight simulator training and qualification curriculums to their approved training programs because of the need to maintain and demonstrate proficiency in performing those maneuvers that are a part of the procedures.

**d.** After the operator has evaluated a particular airport and has made a determination that it should be listed in appendix 1, the airport assessment aid contained within Appendix 2 should be completed and submitted to the operator's principal operations inspector (POI). The POI will forward the recommendation with his/her comments to the Air Transportation Division (AFS-200).

NOTE: If the airport has been evaluated by an individual other than person associated with a U.S. Air Carrier, the airport assessment aid should be forwarded directly to AFS-200.

The final determination will be made by AFS-200 relative to airport qualification status and, if appropriate, will include the airport in Appendix 1. Each airport listed in Appendix 1 will have an appropriate effective date listed. The newly revised airport qualification information may be accessed through the Internet in accordance with the guidance provided in paragraph 10. Completed airport assessment aids may be submitted to AFS-220 via electronic mail to the following address: 9-AWA-AFS-AIR-CARRIER@FAA.GOV.

**7. RE-ASSESSMENT OF AIRPORTS PREVIOUSLY DESIGNATED AS REQUIRING SPECIAL QUALIFICATIONS.** Re-assessment of an airport may be necessary due to a variety of factors. Most commonly this situation will occur when improvements in the Air Traffic Facilities serving that airport, improvements in aircraft navigation and autoflight systems, or advances in flightcrew training are introduced. The FAA, Part 121 operators, pilots, or others may initiate a re-assessment of an airport qualification status. This assessment should be conducted in the same manner as described in paragraph 6(c) and (d).

#### 8. SPECIAL AREA/ROUTES.

**a.** In accordance with §§ 121.445(a) and 121.445(d), special PIC navigation qualification is required for operations conducted between terminals over a route or area requiring a special type of navigation system situations in which a special PIC navigation qualification is required including the following:

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- (1) When these systems are required by §§ 121.351 and 121.389 for the area/route to be flown;
- (2) When operations are conducted, with approved navigation systems other than Inertial Navigation System (INS)/Inertial Reference System (IRS) or Inertial Reference Unit (IRU), within the areas of magnetic unreliability (as published in the Canadian Aeronautical Information Publication (AIP)) or over the continent of Antarctica; or
- (3) When operations are conducted over routes where the operations specifications (OpSpecs) require the use of special navigation procedures developed specifically for the routes and the use of navigation equipment (e.g., Auto Direction Finding (ADF), VHF Omni-Direction Radio Range (VOR), Distance Measuring Equipment (DME)) which is restricted to limited operational areas.
- **b.** The situations listed above are not all-inclusive and do not delete or supersede any special navigation qualifications or requirements which may currently exist in a particular air carrier's OpSpecs.
  - NOTE: The special type of navigation qualifications necessary to meet the navigation performance required by Part 91, § 91.705 for operations in the Minimum Navigation Performance Specifications airspace are initial qualification requirements and, as such, are not subject to the recurring 12 calendar-month requirement of § 121.445, or to qualification/requalification by pictorial means.
- **c.** Three acceptable methods of complying with special navigation qualification requirements contained in § 121.445 (d) are as follows:
- (1) By flying over a route or area as PIC using the applicable special type of navigation system within the preceding 12 calendar months;
- (2) By flying over a route or area as PIC under the supervision of a check airman using the special type of navigation system within the preceding 12 calendar months; or
- (3) By completing an approved training program as outlined in Part 121, appendix G within the preceding 12 calendar months.
- 9. AIRPORTS LOCATED WITHIN THE COMMONWEALTH OF INDEPENDENT STATES (CIS) AND THE PEOPLES REPUBLIC OF CHINA (PRC). The recent expansion of aviation with both the CIS and the PRC has not been matched by an increase in the collection and publication of airport and route data necessary to ensure the same level of safety in those areas as the level within the United States or Europe. Until such time as the facilities and data within that area of the world have been found to meet an equivalent standard, the FAA has determined that all airports located within the CIS and PRC will require special PIC qualifications. Air carriers or their pilots currently operating in those geographic areas, or planning to do so in the future, should submit an assessment of each airport within the CIS and PRC to their POI in accordance with the guidance contained within this AC. If a determination is made to remove a specific airport within the CIS and/or PRC from the special airports listed in Appendix 1, a concomitant amendment will be made on the web to reflect that change.

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10. ACCESS TO DATA. This AC will be revised only to reflect changes in either FAA procedure or the described methodology for evaluating PIC qualifications for special area/routes and airports. The special airports listed in Appendix 1 will be updated whenever the AC is revised. In addition, during the period between revisions, the most current list of airports contained in Appendix 1 can be accessed through the following FAA Internet address: http://www.faa.gov/avr/afs/afs220.htm. The information contained on this public web site will be updated on a regular basis and should be used in lieu of the hard copy airport list contained within Appendix 1. Questions or comments on this AC may be submitted to AFS-220 via electronic mail to the following address: 9-AWA-AFS-AIR-CARRIER@FAA.GOV.

Nicholas A. Sabatini Director, Flight Standards Service

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## SPECIAL PIC QUALIFICATION AIRPORTS United States Airports (Lower 48 States)

AIRPORT	ICAO ID	Unique Characteristics & Special Conditions	Effective Date
Anniston, AL	KAND	Traffic complexity	06/20/90
Ashville, NC	KAVL	Mountainous terrain	06/20/90
Aspen, CO	KASE	Mountainous terrain in immediate vicinity of airport, all quadrants, high climb gradient performance requirements, special procedures	06/20/90
Beckley, WV	KBKW	Mountainous terrain	06/20/90
Binghamton, NY	KBGM	Mountainous terrain	06/20/90
Birmingham, AL	KBHM	Mountainous terrain	06/20/90
Bluefield, WV	KBLF	Mountainous terrain	06/20/90
Bullhead City, AZ, Laughlin/Bullhead International	KIFP	Rapidly rising terrain (North, South and west quadrants) High departure climb gradient performance requirements	xx/xx/99*
Burbank, CA	KBUR	Mountainous terrain	06/20/90
Burlington, VT	KBTV	Mountainous terrain	06/20/90
Butte, MT	KBTM	Numerous obstructions; no tower	06/20/90
Charleston, (Kanawha), WV	KCRW	Mountainous terrain	06/20/90
Cody, WY	KCOD	Mountainous terrain; no approach control; no tower; non-precision approaches only	06/20/90
Cumberland, MD	KCBE	Mountainous terrain	06/20/90
Keene/Dillant-Hopkins, NH	KEEN	Mountainous terrain	06/20/90
Durango, CO	KDRO	High terrain; no radar	06/20/90
Eagle, CO	KEGE	Mountainous terrain, high climb gradient performance requirements	06/20/90
Elmira, (Chemung), NY	KELM	Mountainous terrain	06/20/90
Flagstaff, AZ	KFLG	Mountainous terrain	06/20/90
Gunnison, CO	KGUC	Uncontrolled; numerous obstructions in airport area; complex departure procedures	06/20/90
Hot Springs, VA	KHSP	Mountainous terrain	06/20/90
Hailey, ID (Friedman Memorial)	KSUN	Mountainous terrain; special arrival/ departure procedures	06/20/90
Hayden, Yampa Valley, CO	KHDN	Mountainous terrain, no control tower; special engine- out procedures for certain large aircraft	06/20/90
Huntington, WV	KHTS	Mountainous terrain	06/20/90
Jackson Hole, WY	KJAC	Mountainous terrain, all quadrants; complex departure procedures	06/20/90
Key West (Intl Airport), FL	KEYW	Lake effect upon thermals on short final to 4,800-foot runway	06/20/90
Klamath Falls, OR	KLMT	Mountainous terrain	06/20/90

AIRPORT	ICAO ID	Unique Characteristics & Special Conditions	Effective Date
Lebanon Regional, (Lebanon), NH	KLEB	Mountainous terrain	06/20/90
Minneapolis, MN	KMSP	Complex approach procedure (PRM)	xx/xx/99*
Missoula, MT	KMSO	Mountainous terrain, special procedures	06/20/90
New York, NY (La Guardia)	KLGA	Over water approach, limited visual cues available for adjusting threshold crossing height	06/20/90
Ontario, CA	KONT	Mountainous terrain and extremely limited visibility in haze conditions	06/20/90
Palm Springs, CA	KPSP	Mountainous terrain	06/20/90
Pinal Airpark, (Marana), AZ	KMJZ	Mountainous terrain	06/20/90
Reno, NV	KRNO	High terrain	06/20/90
Rifle/Garfield County Regional, CO	KRIL	Mountainous terrain	06/20/90
Roanoke, VA	KROA	Mountainous terrain	06/20/90
San Diego, CA	KSAN	Rising terrain close to runway	06/20/90
San Francisco Intl, CA	KSFO	Unique arrival and departure procedures	06/20/90
Saranac Lake, NY	KSLK	Mountainous terrain	06/20/90
Shenandoah Valley, VA (Stanton-Waynesboro- Harrisonburg)	KSHD	Mountainous terrain	06/20/90
South Lake Tahoe, CA	KTVL	Unique approach	06/20/90
Telluride, CO	KTEX	High terrain elevation	06/20/90
Washington, DC (National)	KDCA	Special arrival/departure procedures	06/20/90
Wilkes-Barre, PA	KAVP	Mountainous terrain	06/20/90
West Yellowstone, (Yellowstone), MT	KWYS	Mountainous terrain	06/20/90
Worchester Municipal Airport, Worchester, MA	KORH	Terrain, Unique instrument approach procedure	xx/xx/99*

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### SPECIAL PIC QUALIFICATION AIRPORTS

# United States Airports (Alaska and Hawaii)

AIRPORT	ICAO ID	Unique Characteristics & Special Conditions	Effective Date
Dutch Harbor, (Unalaska), AK	PADU	Mountainous terrain. Steep approaches are required due to high terrain. Frequent turbulence and wind shears occur during approaches. Be aware of down sloping terrain towards the runways	06/20/90
Hilo Intl (General Lyman Field), HI	PHTO	Mountainous terrain	06/20/90
Juneau, AK	PAJN	Mountainous terrain	06/20/90
Kahului, HI	PHOG	Mountainous terrain	06/20/90
Ketchikan, AK	PAKT	Mountainous terrain. On both sides of final approach	06/20/90
Kodiak, AK	PADQ	Airport is surrounded by mountainous terrain. Any go- around beyond ILS or GCA MAP will not provide obstruction clearance	06/20/90
Kulik Lake Airport, AK	PLKK	Mountainous terrain	xx/xx/99*
Lihue, Kauai, HI	PHLI	High terrain; mountainous to 2,300 feet within 3 miles of the localizer	06/20/90
Petersburg, AK	PAPG	Mountainous terrain in immediate vicinity of airport, all quadrants	06/20/90
Red Dog, AK	PAED	Mountainous terrain	xx/xx/99*
Sand Point, AK	PASD	Mountainous terrain	06/20/90
Seward, AK	PAWD	Mountainous terrain in the immediate vicinity of airport	06/20/90
Sitka, AK	PASI	Obstruction in missed approach, all quadrants	06/20/90
Valdez, AK	PAVD	Mountainous terrain in immediate vicinity of airport	06/20/90
Wrangell, AK	PAWG	Mountainous terrain in immediate vicinity of airport, all quadrants	06/20/90

### SPECIAL PIC QUALIFICATION AIRPORTS

### **U.S. Military Airports**

AIRPORT	ICAO ID	Unique Characteristics & Special Conditions	Effective Date
Adak Island NAF, AK	PADK	Terrain rises sharply on the departure ends of Runways 23 and 36. Due to the high terrain, unforecast turbulence is possible, especially in the vicinity downwind of the 5,710 foot volcano 24 NM NE of Adak. Approaches to Runways 05 and 18 are over terrain sloping down toward the runway	06/20/90
Cape Lisburne LRRS, AK	PALU	Mountainous terrain in approach zones; nonstandard instrument approach. The approach to Runway 26 necessitates skirting a 650-ft MSL hill located 2 NM from touchdown. The approach to runway 08 requires an angling final approach due to intrusion of cliffs into the extended Runway 08 centerline. Runway has a 5 foot-tall lip at both ends. There is a potential for wind shear when winds aloft differ from surface winds. Aircraft may incur significant damage when operating on gravel runways	06/20/90
Cape Newenham LRRS, AK	PAEH	Runway located on mountain slope with high gradient factor; nonstandard instrument approach. Extreme slope of runway gives illusion of very steep descent when on normal glide slope for Runway 14.  Departure end of Runway 32 (lower end) is flanked on the west (left) side by a filled area which can cause the left side runway markers to appear to be runway centerline. Visibility is reported from the weather station that is located at the lower end of the runway and faces north, normally away from sun. The Runway 14 approach is to the south, normally into the sun, and effective visibility on final may be much less than reported, especially in haze, snow or broken layered conditions. Recommend landing configuration be established far enough prior to touchdown to allow for go-around in the event of landing gear and/or flap malfunctions, and to allow sufficient time to visually acquire the runway and establish normal glide slope. Do not rely on VASI for glide slope information, as the VASI runway intercept point is 500 feet past the threshold. Reliance on the VASI will cause long landings. Runway has 5 foot-tall lip at both ends. Aircraft may incur significant damage when operating on gravel runways	06/20/90

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# SPECIAL PIC QUALIFICATION AIRPORTS U.S. Military Airports

Cape Romanzof, AK	PACZ	Runway located on side of mountain; mountainous terrain both sides and north end of runway. Steep drop off at both ends of runway. The runway is located on the northwest side of a 2,100 foot MSL mountain. Frequent visual illusions, especially in marginal weather conditions, due to location of runway slope of mountain and frequent lack of centerline. Approach is 25 degrees off runway heading and the angling approach makes runway slope seem steeper than actual. Unforecast moderate turbulence and sudden downdrafts may be encountered on short final. The direction of surface winds at the upper and lower ends of the runway may differ by up to 90 degrees. The downhill (northwest) side of the runway drops off sharply. Aircraft may incur significant damage when operating on gravel runways	06/20/90
Indian Mountain LRRS, AK	PAIM	Mountainous terrain. The extreme slope of the runway gives the impression of a very steep final when on normal glide path. Very high MDA on instrument approach requires steep descent to intercept normal glide slope. Aircraft may incur significant damage when operating on gravel runways	06/20/90
Sparrevohn LRRS, AK	PASV	Mountainous terrain. The approach to Runway 34 is over a 2,000 foot MSL (approximately 640 feet above threshold) ridge 1-1/4 miles from the runway. During the instrument portion of the approach, the runway is not visible until on or near the visual final approach. Careful navigation and map reading are necessary to avoid confusion between three similar valleys leading to the runway. The first 1,000 feet of Runway 34 is essentially level, followed by a gradual dip and then an estimated 10% up slope gradient on the final portion of the landing surface. During periods of thaw, ramp may have accumulations of glare ice. Edges of ramp are not marked. There is a 30 foot cliff at the upper edge of the ramp. At the lower edge of the ramp, there is a 15 foot drop off. During periods of thaw, water may flow over first 1,000 feet of runway and refreeze, creating glare ice that may obscure runway markings. Aircraft may incur significant damage when operating on gravel runways	06/20/90
Tatalina LRRS, AK	PATL	There is no published instrument approach to Tatalina.; mountainous terrain. Winds in excess of 20 knots may produce severe turbulence. Unforecast turbulence and downdrafts may be encountered on approaches to either runway. The runway is located on a plateau with drop off on either end that may cause a perceptual illusion resulting in a low or dragged-in approach. Runway constructed of gravel and shale; extremely slippery when wet. There are no overruns. Steep drop off at either end of runway	06/20/90

# SPECIAL PIC QUALIFICATION AIRPORTS U.S. Military Airports

Tin City LRRS, AK	PATC	Mountainous terrain. The airport is located in the Alaskan Buffer Zone. Aircraft may incur significant damage when operating on gravel runways. The runway is located on a steep bluff, which may cause perceptual problems resulting in low or dragged-in approaches to Runway 34. Lack of contrast during the winter often makes the runway difficult to acquire visually. Sea ice can give an indication of a false shoreline on RADAR. The high center crown of the runway may cause the runway to appear much shorter than actual just prior to and during touchdown. During summer months uncontrolled light aircraft use the seasonal landing strip located 1/2 NM west of the parking ramp. There is a 10 feet high embankment	06/20/90
		parking ramp. There is a 10 feet high embankment leading up to approach end of Runway 16	

### **European Airports**

AIRPORT	ICAO ID	Unique Characteristics & Special Conditions	Effective Date
Sondre Stromfjord AB, (Sondestrom) Greenland	BGSF	Terrain; missed approach procedures	06/20/90
Stuttgart, Germany	EDDS	Complex ATC procedures; limited approach facilities	06/20/90

### China (PRC) Airports

AIRPORT	ICAO ID	Unique Characteristics & Special Conditions	Effective Date
All Airports in the	All A/P's	Limited information	06/20/90
People's Republic of China, except Shenzhen Huangtian Airport, China			

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### SPECIAL PIC QUALIFICATION AIRPORTS

### **Pacific Airports**

AIRPORT	ICAO ID	Unique Characteristics & Special Conditions	Effective Date
Fukuoka, Japan	RJFF	High terrain, high towers, obstructions within circling area, special procedures	06/20/90
Hong Kong Intl, (Chek Lap Kok) Hong Kong, PR of China	VHHH	Special approach, mountainous terrain, high climb gradient performance requirements on departures	06/20/90
Pago Pago, Tutuila Island, U.S. (American Samoa)	NSTU	Mountainous terrain	06/20/90

### **Caribbean Airports**

AIRPORT	ICAO ID	Unique Characteristics & Special Conditions	Effective Date
Ft. De France, Martinique	TFFF	Terrain	06/20/90
Guantanamo Bay, Cuba	MUGM	Unique approach requirements; Limited maneuvering airspace due to politically sensitive territorial boundaries	06/20/90
Pointe-A-Pitre, Guadeloupe	TFFR	Mountainous terrain	06/20/90
Santa Domingo, Dominican Rep. (Las Americas)	MDSD	No radar environment; prohibited area and San Isidro Air Base Northeast of field	06/20/90
St. Maarten I, Neth Antilles (Phillipsburg)	TNCM	Mountainous terrain	06/20/90
St. Thomas I, Virgin Is (Charlotte Amalie).	TIST	Mountainous terrain	06/20/90

### **Central American Airports**

AIRPORT	ICAO ID	Unique Characteristics & Special Conditions	Effective Date
San Jose, Costa Rica	MROC	Mountainous terrain; unreliable NAVAIDs	06/20/90
Tegucigalpa, Hunduras	MHTG	Mountainous terrain	06/20/90

# SPECIAL PIC QUALIFICATION AIRPORTS South American Airports

AIRPORT	ICAO ID	Unique Characteristics & Special Conditions	Effective Date
Bogota, Colombia (Eldorado International)	SKBO	High Elevation, mountainous terrain rising steeply to 13,000 feet MSL from north, east to south, high climb gradient performance requirements on departures	xx/xx/99*
Cali, Colombia	SKCL	Mountainous Terrain (east & west quadrants), Airport is in a valley between two steeply rising north-south ridges, Airport is bordered on the west by military restricted areas, Non radar environment, Limited English language	xx/xx/99*
Guadalajara, Mexico	MMGL	High terrain; special departure procedure	06/20/90
Guatemala City, Guatemala	MMGT	High field elevation; mountainous terrain; unique	06/20/90
		departure restrictions; optical illusion: big dip in runway; heavy rubber deposits both ends of runway: braking action nil when wet	(Updated information)
La Paz, Bolivia	SSLP	High altitude requires special performance	06/20/90
Loreto Int'l, Mexico	MMLT	Rapidly rising terrain (south & west quadrants)	xx/xx/99*
Pasto, Colombia (Antonio Narino)	SKPS	Mountainous terrain (all quadrants). High climb gradient performance requirements due to rapidly rising terrain	xx/xx/99
Pereira, Colombia (Matecana)	SKPE	Mountainous terrain (all quadrants). High climb gradient performance requirements due to rapidly rising terrain	xx/xx/99
Quito, Ecuador	SEQU	Special approach procedure	06/20/90
Rio De Janeiro, Brazil (Galeao)	SBGL	Mountainous terrain; complexity of approaches; high traffic density	06/20/90

\*THESE DATES WILL BE INSERTED UPON FINAL SIGNATURE OF THIS AC. THEY WILL BE THE EFFECTIVE DATE OF THIS AC. THIS NOTE WILL BE REMOVED WHEN THOSE DATES ARE INCORPORATED.

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## AIRPORT ASSESSMENT AID For Determining Special Airport Designation (Ref.: 14 CFR § 121.445)

This aid (3 pages) should be completed and submitted to the following address for review and action: Federal Aviation Administration, Air Transportation Division, Rm. 831, Attn.: AFS-220 800 Independence Avenue, SW, Washington, DC 20591

Name		Address			Phone/Fax/Internet	
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Airport Name, ICAO						
Identifier, City, State, Country						
Type(s) of Aircraft Addressed In This Assessment: M/M/S						
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	(See attached sheets for spec	cific comments	indicating	a nee	_	a need for
	regarding the items listed belo		conditions	deve		special pilot
			pilots need	opera	ating	training &
			to be	proced	dures	qualification
			aware of			
1.	Obstructions					
2.	Complex Approach/Missed	Approach/Departure				
3. Limited Maneuvering Airspace		308				
4.	Human factors:	100				
	Language/Accents					
	Different Measurement U					
	High Workload (e.g., com	nplex appr/dep. Proc)				
5.	Optical Illusions Limited Airport Information	(accuracy/currency)				
6.	Performance Limitations (o	• • • • • • • • • • • • • • • • • • • •				
	limitations)					
7.	Runway Length/Width					
8.	Unique Country Rules-Diffe	rent than ICAO				
9.	Communication, navigation					
	Anomalies-specific to appr.	•				
10.	(Appr. Control Radar or lack Applicable SFAR	( OI ATC)				
11.	Controlled or Uncontrolled	Airport				
12.	Local Weather Conditions/					
	Weather Data and NOTAM is	-				
13.	Loss of Navigational Aids o	r Powerplant				
Recommend Special Airport Designation		Yes		No		

### Appendix 2

1.	Obs	structions:					
	a.	Is there high terrain located in the immediate vicinity of the airport? $\underline{YES}$ / $\underline{NO}$					
	b.	What is the highest terrain within:					
		05nm of the approach/departure end of the runway?feet/meters 10nm of the approach/departure end of the runway?feet/meters 15nm of the approach/departure end of the runway?feet/meters 20nm of the approach/departure end of the runway?feet/meters					
	C.	Other remarks regarding the local terrain:					
	d.	Attach a copy of a map (topographical) depicting the location of the terrain mentioned above.					
	e.	List obstructions located in the approach/departure corridor:					
		1					
2.	Cor	mplex Approach/Missed Approach/Departure Procedure:					
	a.	Attach a copy of the chart depicting the approach/departure procedure.					
	b.	State the degree of complexity of the procedure (terrain/obstacle/other) and any unique local procedure	ıres:				
	С.	Does the approach have a non-standard descent (greater than 3° glide slope)? YES / NO					
	d. —	Climb gradient: If there is a climb gradient requirement shown please write down that requirement.					
3.	Sta	ate the limitations (e.g., political, terrain) to maneuvering airspace. tate the specific aircraft type):					
4.	Hur	man Factors Issues:					
	a.	a. Language/accents					

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b. Different Measurement Units
c. High Workloads (e.g., complex approach/departure procedures)
d. Optical Illusions
5. Limited Airport Information (accuracy/currency) [Example; There is mountainous terrain in close proximity of the airport with no indication of a required climb gradient]
6. Performance Limitations other than obstacle limitations (Example; limited maneuvering airspace due to politically sensitive airspace):
7. Runway Length/Width:
8. Unique Country Rules-Different from ICAO:
9. Communication, Navigation and Surveillance Anomalies-specific to approach and departures (Appr Control Radar or lack of ATC):
10. Special Airspace flight rules (Example; SFAR 50-2):
11. Controlled or Uncontrolled Airport:  12. Local Weather Conditions/ Availability of Weather Data and NOTAM information:
13. Loss of Navigational Aids or Powerplant: (Would a loss of navigation aids or powerplant require special procedures to avoid collision or breach of politically sensitive airspace):